Remarks

Reconsideration of the subject application is requested in view of the following remarks.

Claims 1-35 are pending. In this paper, no claims are amended.

Applicants appreciate the search performed by the examiner in the course of substantively examining the claims.

The allowance of claims 21-25 and 35 is acknowledged with thanks. Also acknowledged with thanks is the status of claims 3-7, 9, 11-19, 27-28, and 33 as being free of the prior art.

Claims 1-2, 8, 10, 20, 26, 29-32, and 34 stand rejected for alleged obviousness from a combination of FIG. 10 in the instant application, JP 3-157918, and JP 2002-252164. This rejection is traversed.

It is first pointed out that JP 2002-252164 was published on September 6, 2002. The instant application has a priority date of August 4, 2002, which is earlier than the publication date of JP '164. Hence, JP '164 is not 102(e) prior art. As required, enclosed herewith is a certified literal translation of the priority document for the instant application.

Also enclosed herewith is an English translation of JP 3-157918, which Applicants had prepared in order to understand better the specific disclosures of this reference.

FIG. 10 of the instant application shows a plan view of a conventional RSP (reticle pod) configured to hold a thick, square reticle of the type used in optical microlithography, not in charged-particle-beam microlithography. As described in the specification (page 2, lines 15-27):

> Attached to the base 81 at each of the four corners of the upper surface of the base are respective reticle-receiving pads 85. Each reticle-receiving pad 85 has a substantially oval-shaped plan profile that longitudinally extends toward the center of the base 81 and presents a respective "upward"-facing reticle-contact surface. The reticle R is placed in the RSP 80 such that the four corners of the square reticle R are supported on respective reticle-receiving pads 85, as shown. For mounting purposes, the reticle R typically has a generously wide non-patterned periphery that includes the four corners of the reticle. To secure the reticle R to the base 81, each respective corner of the reticle is urged against the respective receiving pad 85 by a respective presser member (not shown) mounted to a corresponding location on the inside ("lower") surface of the cover 83. To prevent entry of debris from the external environment into the RSP 80 while allowing pressure equalization, at least one filter 87 is provided at respective corner(s) of the base 81.

However, as further stated in the specification (page 3, line 7 to page 4, line 9):

> In recent years, substantial engineering effort has been directed to the development of a practical "next-generation" microlithography system that offers prospects of producing finer pattern-transfer resolution than currently obtainable using optical microlithography. One attractive next-generation lithography (NGL) approach involves the use of a charged particle beam, such as an electron beam or ion beam, as the lithographic-energy beam. A key challenge in the development of a practical electron-beam microlithography system is configuring the system to produce the desired fine-ness of pattern-transfer resolution without sacrificing "throughput" (number of units, such as semiconductor wafers, that can be lithographically exposed by the system per unit time).
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> In an electron-beam (EB) microlithography system, the square, glass reticle conventionally used for optical microlithography is not used. Instead, the reticle typically is round (*e.g.*, 200 mm in diameter) and much thinner (*e.g.*, 0.5 to 1.0 mm) than an optical-lithography reticle. The typical shape of the EB-lithography reticle is that of a SEMI standard wafer or SEMI standard notched wafer. Almost the entire surface of the EB-lithography reticle is patterned. Since the entire pattern cannot be exposed in a single exposure "shot," the EB lithography reticle is divided into multiple "exposure units" (usually termed "subfields") each defining a respective portion of the pattern. The subfields are individually exposed. During exposure an electron beam is irradiated, from above, onto a selected subfield of the reticle.
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> Portions of the reticle that define pattern features and that actually are irradiated by the electron beam are very thin and delicate. Consequently, these portions of the reticle must not contact any other surfaces (such as a surface of a reticle pod). Rather, the reticle must be handled and supported only by its non-patterned (and more robust) peripheral "handling zone." The handling zone of an EB-lithography reticle typically is narrow, with a maximum usable "handling" width of several mm. Either or both the "upper" and "lower" surfaces of the handling zone can contact other surfaces such as of the reticle pod.
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> Since conventional reticle pods, such as the RSP 80 shown in FIG. 10, are configured for holding relatively thick, square reticles for use in optical microlithography, these pods are not suitable for holding thin, round, EB-lithography reticles having a narrow peripheral "handling" width of only several mm.

Hence, it readily can be seen that reticle pods, such as that shown in FIG. 10 of the instant application and that are specifically configured for holding the relatively thick, square reticles as used in optical microlithography, provide very little useful information to the skilled person for use in deriving a reticle pod for holding a thin, round reticle of the type used, e.g., in

modern EB-microlithography systems. Indeed, the reticle holder of FIG. 10 provides no hint as to the peculiar holding requirements posed by round reticles, especially by the extremely delicate types of round reticles used in EB-microlithography systems that project a pattern from a reticle to a wafer substrate.

JP '918 (English translation enclosed) was laid open on July 5, 1991, which predates the debut of electron-beam microlithography of a pattern from a reticle to a lithographic substrate. Rather, JP '918 appeared at a time when electron-beam lithography was used to make the masks used in optical lithography. See English translation, page 2, last three lines. In other words, JP '918 only contemplates, and only addresses, the task of holding a thick, heavy, rectilinear "mask dry plate" as the mask dry plate is placed in the exposure apparatus in which a mask pattern is "written" on the resist-coated surface of the mask dry plate. See English translation, page 3, first four lines. Hence, JP '918 does not disclose or suggest anything concerning a reticle "pod" as instantly claimed, does not disclose or suggest holding a reticle in a pod, and does not disclose or suggest anything concerning round reticles or their particular holding requirements in a pod. In fact, in FIGS. 5(a)-5(b) of JP '918 the particular combination of spring-loaded rods 6, "surface regulating plates" 5, and needles 8, all configured to hold a rectilinear, thick, heavy, glass plate, would impart forces having combinations of magnitudes and directions that would fracture the type of round reticles to which the instant claims are directed, especially if these structures were incorporated into a reticle pod. Similarly, in FIGS. 1(a)-1(b) and 2 of JP '918 the particular combination of clamp 11, clamps 12, springs 13, and V-shaped grooves (FIG. 2), all configured to hold a rectilinear, thick, heavy, glass plate, would impart forces having combinations of magnitudes and directions that would fracture the type of round reticles to which the instant claims are directed, especially if these structures were incorporated into a reticle pod.

Therefore, the combination of FIG. 10 of the instant application and JP '918 does not provide sufficient motivation, disclosure, or suggestion to the skilled person to derive a reticle pod having the particular combination of features as claimed.

Therefore, all the pending claims are in condition for allowance, and early action to such end is requested.

Applicants have a right to an interview at this stage of prosecution. If any issues remain unresolved after consideration of the contents of this paper, the examiner is requested to contact the undersigned to schedule a telephonic interview. Any inaction by the examiner to make such

contact, followed by issuance of a final action, will be regarded as an acquiescence by the examiner to grant an interview as a matter of right after the final action.

Respectfully submitted,

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